

Sacramento River Temperature Task Group (SRTTG) Meeting
Thursday, September 22, 2016 | 1:00 pm – 2:00 pm

DRAFT MEETING SUMMARY

Participants

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| • Craig Anderson, USFWS | • Jason Roberts, CDFW |
| • Matt Brown, USFWS | • John Rueth, USFWS |
| • Charlie Chamberlain, USBR | • Jim Smith, USFWS |
| • Kyle DeJulio, Yurok Tribe | • Brycen Swart, NMFS |
| • Vadim Demchuk, SWRCB | • Thuy Washburn, USBR |
| • Ken Emanuel, SWRCB | • Mike Wright, USBR |
| • Randi Field, USBR | • Garwin Yip, NMFS |
| • Josh Israel, USBR | • Mike Harty, Kearns & West (Facilitator) |
| • Liz Kiteck, USBR | |
| • Duane Linander, CDFW | Note-taking: |
| • Ron Milligan, USBR | 1. Briana Seapy, Kearns & West |

Action Items:

1. Kearns & West Kearns will distribute an SRTTG monthly Outlook invite.
2. NMFS/USBR will reflect on a best approach to structure the technical annual review process to accommodate relevant field information and important decision-maker timelines, and will consider potential interim products.

Key Discussion Topics with Summary of Outcomes and Agreements

Ron Milligan and Liz Kiteck introduced Randi Field who will be replacing Thuy Washburn as the USBR Sacramento River Operations Manager. Liz noted that operations managers rotate river systems every 4-5 years, and that Randi will overlap with Thuy to facilitate a smooth transition. Randi comes to the Sacramento River from the American River.

Fishery Update

USFWS reported that winter run juvenile monitoring is entering its peak season from mid-September to mid-October. Through September 9, 2016, juvenile winter run Chinook at the Red Bluff Diversion Dam were recorded at over 160,000, the highest numbers since 2010 for the same time of year. It is too early for USFWS to reliably predict total run numbers. The bi-weekly counts are posted to the USFWS website at https://www.fws.gov/redbluff/rbdd_biweekly_final.html.

CDFW summarized the status of winter run escapement, noting that the current winter run Chinook escapement estimate is 1,545, while the initial escapement estimate was only 600-800. CDFW is coordinating with USBR to mitigate for dewatering risks. CDFW advised that it submitted a supplemental briefing book to the Pacific Fishery Management Council; reference the [2-page report on Sacramento River winter run Chinook](#)

[for more information](#). CDFW is coordinating with USBR to mitigate for dewatering risks.

USFWS reported on brood stock collection for the Livingston Stone National Fish Hatchery, noting that 93,000 fry are in tanks and that the egg to fry survival rate through the first thirty days was 94%. USFWS commented that the female fish were generally smaller than usual this year and produced an average of 3,500 eggs per female, which is lower than usual. Details on related coded wire tag recoveries can be found in the above linked report and suggest that recoveries of 3-year old salmon are expected to exceed previous years.

USFWS detected spring run Chinook spawning in Clear Creek. All observed spawning occurred downstream of IGO, and spawning is anticipated to last another three weeks. Daily average water temperatures at the IGO temperature compliance points were exceeded in Clear Creek for three days in late September due to high air temperatures and increasing reservoir release temperatures.

USBR commented that carcasses recovered by a USFWS team in Red Bluff were submitted to a lab for genetic identification in early August, and the last carcass submitted was identified as a winter run Chinook salmon that was previously tagged at KWK on May 31. USBR estimated that of the viable carcasses, 36 out of the 38 fish tested were winter run Chinook.

Hydrology & Operations Update

(See September 22 Meeting Agenda and Handout for the following reference materials: Mean Daily Water Temperatures; Redding 10-day Forecasted Air Temperatures; Sac River Gage Temp Plot and Air Temp Plot; Lake Shasta Isothermalbaths Plot; 7 DADM; Lake Shasta Current TCD Configuration; information is available on CVO's web-page)

USBR reviewed system water temperatures, the Shasta TCD configuration, and Lake Shasta isothermal baths, and commented that water temperatures were meeting the temperature compliance criterion and not in excess of 56.0° F daily average temperature at Ball's Ferry. The Shasta TCD was adjusted on September 16 when the last middle gate was closed and an additional lower Pressure Relief Gate (PRG) was opened leaving all five PRGs open. Water temperature is roughly 48-52° F at the PRG gate level. Ball's Ferry is tracking at about 54.0° F on a daily average, and Lake Shasta isothermal baths appear normal. On Clear Creek, there was a temperature criterion exceedance at IGO which caused USBR to open lower guard gates at the Whiskeytown Reservoir on September 13.

USBR reviewed 7 DADM water temperatures, commenting that CCR is tracking below 55.0° F, and that a 51.5° F temperature target at KWK is expected to maintain water temperature below 55° F at CCR.

SRTTG participants discussed winter run fry emergence and identified November 15 as the likely last day for final fry emergence. Management actions for protection of this redd are uncertain.

Sacramento River Modeled Temperature and August Temperature Studies

(See September 22 Meeting Agenda and Handout: Sacramento River Modeled Temperature; Redding Average/Maximum Daily Air Temp)

USBR projects that the TCD side gates will not need to be opened before November 4. USBR shared a graph indicating that the Shasta Reservoir has consistently held greater volumes of 49° F water than expected based on the June temperature model run. Currently, the reservoir exceeds model predictions for water that is less than or equal to 49° F by 310,000 AF. This excess of cold water is likely attributable to a milder summer and to

USBR's careful management of TCD configurations whereby USBR re-opened upper gates after periods of cooling.

The US Army Corps of Engineers and USBR track the flood curve and flood storage space respectively.

Klamath Update

Preventative flows were released in the Trinity River to increase base flow at the mouth of the Klamath River due to anticipated low flows and observations of Ich. The preventative flows are yielding improved conditions and fewer occurrences of Ich.

General Discussion

SRTTG membership and purpose

On the topic of SRTTG membership, USBR observed that there is a greater interest in plan development and early season input than there is interest in weekly or monthly participation in the SRTTG. Accordingly, USBR intends to maintain SRTTG membership, but address input from interested stakeholders such as the Settlement Contractors, NGOs, and water supply interests in late winter and early spring. USBR is discussing potential RPA adjustments as a way to gather more temperature plan input and maximize utility of SRTTG in temperature plan development and implementation.

Technical report drafting and deadline

USBR observed that for them to produce a complete technical annual report for the Sacramento River that includes information on juvenile fish passage past Red Bluff, mid-December would be a reasonable target deadline. USBR plans to have most of the report drafted before December, but noted that it is particularly important to capture the full seasonality of temperature operations to understand juvenile passage at Red Bluff. USBR identified similar timing challenges for other river systems such as the American. USBR suggested that interim products could be used to meet RPA identified timelines, but emphasized that it is valuable to have a record of complete reports with full seasonal information.

NMFS commented that biologically, USBR's suggested timeframe makes sense, but with respect to the RPA action requiring an annual technical review no later than November 30, USBR's suggested timeframe compromises the steps needed to allow for panel review and presentation of aggregate recommendations to decision-makers. NMFS indicated a preference to adhere to the identified schedule this year, but commented that there is no annual review this year.

Next Meeting

The next meeting of the SRTTG is scheduled for Thursday, October 27 at 1pm. This meeting will be held in the CVO office in Sacramento with the option to participate via conference call. In-person attendance is encouraged to allow Randi Field the opportunity to meet SRTTG members in person.